CUMULATIVE INDEXES

CONTRIBUTING AUTHORS, VOLUMES 8-12

Adamson, T. C. Jr., 103-38 Allen, J. S., 12:389-433 Ashton, G. D., 10:369-92

B

Baker, G. R., 11:95-122 Belotserkovskii, S. M., 9:469-94 Berman, N. S., 10:47-64 Binnie, A. M., 10:1-10 Bird, G. A., 10:11-31 Bird, R. B., 8:13-34 Bogy, D. B., 11:207-28 Bradshaw, P., 9:33-54 Brennen, C., 9:339-97 Buchhave, P., 11:443-503 Busse, F. H., 10:435-62

C

Callander, R. A., 10:129-58 Canny, M. J., 9:275-96 Cermak, J. E., 8:75-106 Christensen, J., 12:139-58 Comte-Bellot, G., 8:209-31 Corcos, G. M., 10:267-88 Crighton, D. G., 11:11-33

D

Davidson, J. F., 9:55-86 Davis, S. H., 8:57-74 Denn, M. M., 12:365-87 Dickinson, R. E., 10:159-95 Dowson, D., 11:35-66 Dussan V., E. B., 11:371-400

E

Emmons, H. W., 12:223-36

F

Ffowcs Williams, J. E., 9:447-68 Fischer, H. B., 8:107-33 Fletcher, N. H., 11:123-46 Flick, R. E., 8:275-310

G

Garrett, C., 11:339-69 George, W. K. Jr., 11:443-503 Griffith, W. C., 10:93-105 Guedes de Carvalho, J. R. F., 9:55-86

H

Harrison, D., 9:55-86 Hart, J., 11:147-72 Hasimoto, H., 12:335-63 Herczyński, R., 12:237-69 Hill, J. C., 8:135-61 Holt, M., 8:187-214 Hütter, U., 9:399-419

I

Imberger, J., 10:267-88 Inman, D. L., 8:275-310

J

Jenkins, J. T., 10:197-219 Jones, R. T., 9:1-11

K

Keller, H. B., 10:417-33

L

Lai, W. M., 11:247-88
Lake, B. M., 12:303-34
Landweber, L., 11:173-205
Laws, E. M., 10:247-66
Leal, L. G., 12:435-76
Lebovitz, N. R., 11:229-46
Leibovich, S., 10:221-46
Leith, C. E., 10:107-28
Libby, P. A., 8:351-76
Lin, J.-T., 11:317-38
Livesey, J. L., 10:247-66
Lumley, J. L., 11:443-503

M

Macagno, E. O., 12:139-58 MacCormack, R. W., 11:289-316 McIntire, L. V., 12:159-79 Mei, C. C., 10:393-416 Messiter, A. F., 12:103-38 Miles, J. W., 12:11-43 Morel-Seytoux, H. J., 8:233-74 Mow, V. C., 11:247-88 Munk, W., 11:339-69 Mysak, L. A., 12:45-76

N

Naudascher, E., 11:67-94 Nordstrom, C. E., 8:275-310

P

Pao, Y.-H., 11:317-38 Parlange, J.-Y., 12:77-102 Patel, V. C., 11:173-205 Patterson, G. S. Jr., 10:289-300 Pearson, J. R. A., 8:163-81 Pedley, T. J., 9:229-74 Peterlin, A., 8:35-55 Pieńkowska, I., 12:237-69 Pipkin, A. C., 9:13-32 Plesset, M. S., 9:145-85 Prosperetti, A., 9:145-85

R

Reethof, G., 10:333-67 Reshotko, E., 8:311-49 Reynolds, W. C., 8:183-208 Rhines, P., 11:401-41 Rockwell, D., 11:69-94 Rouse, H., 8:1-12 Rusanov, V. V., 8:377-404 Ryzhov, O. S., 10:65-92

S

Saffman, P. G., 11:95-122 Sano, O., 12:335-63 Saville, D. A., 9:321-37

486 CONTRIBUTING AUTHORS

Sears, M. R., 11:1-10 Sears, W. R., 11:1-10 Seebass, R., 12:181-222 Shen, S.-F., 9:421-45 Sherman, F. S., 10:267-88 Spielman, L. A., 9:297-319

T

Tani, I., 9:87-111 Tanner, R. I., 9:13-32 Taub, A. H., 10:301-32 Taylor, C. M., 11:35-66 Tijdeman, H., 12:181-222 Tuck, E. O., 10:33-44

U

Uhlenbeck, G. E., 12:1-9

W

Williams, F. A., 8:351-76 Williams, J. C. III, 9:113-44 Winant, C. D., 12:271-301 Winet, H., 9:339-97 Wooding, R. A., 8:233-74

Y

Yaglom, A. M., 11:505-40 Yuen, H. C., 12:303-34

Z

Zel'dovich, Ya. B., 9:215-28

CHAPTER TITLES, VOLUMES 8-12

| HISTORY | | |
|---|--|-------------------|
| Hydraulics' Latest Golden Age Recollections from an Earlier Period in | H. Rouse | 8:1-12 |
| American Aeronautics | R. T. Jones | 9:1-11 |
| History of Boundary-Layer Theory Some Notes on the Study of Fluid Mechanics | I. Tani | 9:87-111 |
| in Cambridge, England | A. M. Binnie | 10:1-10 |
| The Kármán Years at GALCIT Some Notes on the Relation Between Fluid Mechanics and Statistical Physics | W. R. Sears, M. R. Sears G. E. Uhlenbeck | 11:1-10 12:1-9 |
| | O. D. Cilicitetti | |
| FOUNDATIONS Steady Non-Viscometric Flows of Viscoelastic | | |
| Liquids | A. C. Pipkin, R. I. Tanner | 9:13-32 |
| Relativistic Fluid Mechanics | A. H. Taub | 10:301-32 |
| NON-NEWTONIAN FLUIDS, RHEOLOGY | | |
| Useful Non-Newtonian Models | R. B. Bird | 8:13-34 |
| Instability in Non-Newtonian Flow | J. R. A. Pearson | 8:163-81 |
| Steady Non-Viscometric Flows of Viscoelastic | | |
| Liquids | A. C. Pipkin, R. I. Tanner | 9:13-32 |
| INCOMPRESSIBLE, INVISCID FLUIDS | | |
| Vortex Interactions | P. G. Saffman, G. R. Baker | 11:95-112 |
| COMPRESSIBLE FLUIDS | | |
| A Blunt Body in a Supersonic Stream | V. V. Rusanov | 8:377-404 |
| Compressible Turbulent Shear Layers | P. Bradshaw | 9:33-54 |
| Viscous Transonic Flows | O. S. Ryzhov | 10:65-92 |
| Transonic Flow Past Oscillating Airfoils | H. Tijdeman, R. Seebass | 12:181-222 |
| MAGNETOHYDRODYNAMICS, PLASMA FLO | W ELECTROHYDRODYNAMICS | |
| Electrokinetic Effects with Small Particles Magnetohydrodynamics of the Earth's | D. A. Saville | 9:321-37 |
| Dynamo | F. H. Busse | 10:435-62 |
| VISCOUS FLUIDS | | |
| Steady Non-Viscometric Flows of Visoelastic | | |
| Liquids | A. C. Pipkin, R. I. Tanner | 9:13-32 |
| Electrokinetic Effects with Small Particles | D. A. Saville | 9:321-37 |
| Viscous Transonic Flows | O. S. Ryzhov | 10:65-92 |
| Stokeslets and Eddies in Creeping Flow | H. Hasimoto, O. Sano | 12:335-63 |
| Particle Motions in a Viscous Fluid | L. G. Leal | 12:435-76 |
| BOUNDARY-LAYER THEORY | | |
| Boundary-Layer Stability and Transition | E. Reshotko | 8:311-49 |
| Compressible Turbulent Shear Layers | P. Bradshaw | 9:33-54 |
| History of Boundary-Layer Theory | I. Tani | 9:87-111 |
| Incompressible Boundary-Layer Separation Numerical Methods in Boundary-Layer | J. C. Williams III | 9:113-44 |
| Theory | H. B. Keller | 10:417-33 |
| Ship Boundary Layers | L. Landweber, V. C. Patel | 11:173-205 |
| Analysis of Two-Dimensional Interactions Between Shock Waves and Boundary | | |
| Layers | T. C. Adamson Jr., A. F. Messiter | 12:103-38 |
| | | |

488 CHAPTER TITLES

| STABILITY OF FLOW The Stability of Time-Periodic Flows | S. H. Davis | 8:57-74 |
|---|--|------------------------|
| Instability in Non-Newtonian Flow | J. R. A. Pearson | 8:163-81 |
| Boundary-Layer Stability and Transition | E. Reshotko | 8:311-49 |
| The Structure of Vortex Breakdown Self-Sustained Oscillations of Impinging Free | S. Leibovich | 10:221-46 |
| Shear Layers | D. Rockwell, E. Naudascher | 11:67-94 |
| Finite Amplitude Baroclinic Instability | J. E. Hart | 11:147-72 |
| TURBULENCE | | |
| Homogeneous Turbulent Mixing with Chemical Reaction | J. C. Hill | 8:135-61 |
| Computation of Turbulent Flows | W. C. Reynolds | 8:183-208 |
| Hot-Wire Anemometry | G. Comte-Bellot | 8:209-31 |
| Turbulent Flows Involving Chemical | | |
| Reactions | P. A. Libby, F. A. Williams | 8:351-76 |
| Compressible Turbulent Shear Layers | P. Bradshaw | 9:33-54 |
| Aeroacoustics Turbulence and Mixing in Stably Stratified | J. E. Ffowcs Williams | 9:447-68 |
| Waters | F. S. Sherman, J. Imberger, G. M. | |
| · · · · · · · · · · · · · · · · · · · | Corcos | 10:267-88 |
| Geostrophic Turbulence | P. B. Rhines | 11:401-41 |
| The Measurement of Turbulence with the | | |
| Laser-Doppler Anemometer | P. Buchhave, W. K. George Jr., J. L. Lumley | 11:443-503 |
| Similarity Laws for Constant-Pressure and | | |
| Pressure-Gradient Turbulent Wall Flows | A. M. Yaglom | 11:505-40 |
| COMBUSTION, FLOWS WITH CHEMICAL RI | EACTION | |
| Homogeneous Turbulent Mixing with Chemical Reaction | J. C. Hill | 8:135-61 |
| Turbulent Flows Involving Chemical | | |
| Reactions | P. A. Libby, F. A. Williams | 8:351-76 |
| Dust Explosions | W. C. Griffith | 10:93-105 |
| Scientific Progress on Fire | H. W. Emmons | 12:223-36 |
| SHOCK WAVES, EXPLOSIONS | | |
| A Blunt Body in a Supersonic Stream | V. V. Rusanov | 8:377-404 |
| Underwater Explosions Analysis of Two-Dimensional Interactions Between Shock Waves and Boundary | M. Holt | 9:187-214 |
| Layers | T. C. Adamson Jr., A. F. Messiter | 12:103-38 |
| AERO- AND HYDRODYNAMIC SOUND, ACC | OUSTICS | |
| Aeroacoustics | J. E. Ffowes Williams | 9:447-68 |
| Turbulence-Generated Noise in Pipe Flow | G. Reethof | 10:333-67 |
| Model Equations of Nonlinear Acoustics | D. G. Crighton | 11:11-33 |
| Air Flow and Sound Generation in Musical Wind Instruments | N. H. Fletcher | 11:123-46 |
| FLOWS IN HETEROGENEOUS AND STRATII | | |
| Turbulence and Mixing in Stably Stratified | ILD I LODS, KOTATINO I LOWS | |
| Waters | F. S. Sherman, J. Imberger, G. M. | |
| | Corcos | 10:267-88 |
| Wakes in Stratified Fluids | JT. Lin, YH. Pao | 11:317-38 |
| Geostrophic Turbulence Water Transport in Soils | P. B. Rhines | 11:401-41 12:77-102 |
| • | JY. Parlange | 12:77-102 |
| FREE-SURFACE FLOWS (WATER WAVES, CA Numerical Methods in Water-Wave | AVITY FLOWS) | |
| Diffraction and Radiation | C. C. Mei | 10:393-416 |
| Solitary Waves | J. W. Miles | 12:11-43 |
| Topographically Trapped Waves | L. A. Mysak | 12:45-76 |
| Instability of Waves on Deep Water | H. C. Yuen, B. M. Lake | 12:303-34 |
| BUBBLES, FILMS, SURFACE, BUBBLY FLOW | S, CAVITATION | |
| Bubble Dynamics and Cavitation | M. S. Plesset, A. Prosperetti | 9:145-85 |
| Cavitation in Bearings | D. Dowson, C. M. Taylor | 11:35-66 |
| | | |

| Drop Formation in a Circular Liquid Jet On the Spreading of Liquids on Solid | D. B. Bogy | 11:207-28 |
|--|---------------------------------------|------------|
| Surfaces: Ssc and Dynamic Contact Lines | E. B. Dussan V. | 11:371-400 |
| DIFFUSION, FILTRATION, SUSPENSIONS | | |
| Multiphase Fluid Flow through Porous Media | R. A. Wooding, H. J. Morel-Seytoux | 8:233-74 |
| O. 4. 11 -140. D.L. 1 - 671.14-17.1 | J. F. Davidson, D. Harrison, | 8:233-74 |
| On the Liquidlike Behavior of Fluidized Beds | J. R. F. Guedes de Carvalho | 9:55-86 |
| Particle Capture from Low-Speed Laminar | | |
| Flows | L. A. Spielman | 9:297-319 |
| Drag Reduction by Polymers | N. S. Berman | 10:47-64 |
| Toward a Statistical Theory of Suspension | R. Herczyński, I. Pieńkowska | 12:237-69 |
| NUMERICAL METHODS | | |
| A Blunt Body in a Supersonic Stream | V. V. Rusanov | 8:377-404 |
| Finite-Element Methods in Fluid Mechanics Study of the Unsteady Aerodynamics of | Sf. Shen | 9:421-45 |
| Lifting Surfaces Using the Computer | S. M. Belotserkovskii | 9:469-94 |
| Monte Carlo Simulation of Gas Flows | G. A. Bird | 10:11-31 |
| Prospects for Computational Fluid Mechanics Numerical Methods in Boundary-Layer | G. S. Patterson Jr. | 10:289-300 |
| Theory | H. B. Keller | 10:417-33 |
| Numerical Solution of Compressible Viscous | n. b. Kener | 10.417-33 |
| Flows | R. W. MacCormack, H. Lomax | 11:289-316 |
| EXPERIMENTAL METHODS | | |
| Optical Effects in Flow | A. Peterlin | 8:35-55 |
| Hot-Wire Anemometry | G. Comte-Bellot | 8:209-31 |
| The Measurement of Turbulence with the | | |
| Laser-Doppler Anemometer | P. Buchhave, W. K.George Jr., | |
| | J. L. Lumley | 11:505-540 |
| BIOLOGICAL FLUID DYNAMICS | | |
| Pulmonary Fluid Dynamics | T. J. Pedley | 9:229-74 |
| Flow and Transport in Plants | M. J. Canny | 9:275-96 |
| Fluid Mechanics of Propulsion by Cilia and | | |
| Flagella | C. Brennen, H. Winet | 9:339-97 |
| Mechanics of Animal Joints | V. C. Mow, W. M. Lai | 11:247-88 |
| Fluid Mechanics of the Duodenum | E. O. Macagno, J. Christensen | 12:139-58 |
| Dynamic Materials Testing: Biological and | | |
| Clinical Applications in Network-Forming | | |
| Systems | L. V. McIntire | 12:159-79 |
| FLUID DYNAMICS OF MACHINERY | | |
| Optimum Wind-Energy Conversion Systems | U. Hütter | 9:399-419 |
| FLUID DYNAMICS OF AIRBORNE VEHICLES | | |
| Recollections from an Earlier Period in | | |
| American Aeronautics | R. T. Jones | 9:1-11 |
| Study of the Unsteady Aerodynamics of Lifting Surfaces Using the Computer | S. M. Belotserkovskii | 9:469-94 |
| Litting Surfaces Using the Computer | 3. M. Delotschauvskii | 7.407-74 |
| FLUID DYNAMICS OF WATERBORNE VEHIC Hydrodynamic Problems of Ships in | CLES | |
| Restricted Waters | E. O. Tuck | 10:33-44 |
| Ship Boundary Layers | L. Landweber, V. C. Patel | 11:173-205 |
| FLUID DYNAMICS OF HYDRAULIC STRUCT | URES AND OF THE ENVIRONM | IENT |
| Hydraulics' Latest Golden Age | H. Rouse | 8:1-12 |
| Aerodynamics of Buildings | J. E. Cermak | 8:75-106 |
| GEOPHYSICAL FLUID DYNAMICS | | |
| Mixing and Dispersion in Estuaries | H. B. Fischer | 8:107-33 |
| Currents in Submarine Canyons: An | | 3,10, 00 |
| Air-Sea-Land Interaction | D. L. Inman, C. E. Nordstrom, | |
| | R. E. Flick | 8:275-310 |
| | | |

490 CHAPTER TITLES

| Objective Methods for Weather Prediction | C. E. Leith | 10:107-28 |
|--|------------------------------|--------------|
| River Meandering | R. A. Callander | 10:129-58 |
| Rossby Waves—Long-Period Oscillations of | K. A. Cananoci | 10.127-50 |
| Oceans and Atmospheres | R. E. Dickinson | 10:159-95 |
| River Ice | G. D. Ashton | 10:369-92 |
| Magnetohydrodynamics of the Earth's | G. D. Manton | 10.505 52 |
| Dynamo | F. H. Busse | 10:435-62 |
| Internal Waves in the Ocean | C. Garrett, W. Munk | 11:339-69 |
| Coastal Circulation and Wind-Induced | C. Garren, Island | ************ |
| Currents | C. D. Winant | 12:271-301 |
| Models of Wind-Driven Currents on the | C. D. William | |
| Continental Shelf | J. S. Allen | 12:389-433 |
| ASTRONOMICAL FLUID DYNAMICS | | |
| Hydrodynamics of the Universe | Ya. B. Zel'dovich | 9:215-28 |
| Relativistic Fluid Dynamics | A. H. Taub | 10:301-32 |
| Rotating, Self-Gravitating Masses | N. R. Lebovitz | 11:229-46 |
| OTHER APPLICATIONS | | |
| Flow through Screens | E. M. Laws, J. L. Livesey | 10:247-66 |
| Continuous Drawing of Liquids to Form | | |
| Fibers | M. M. Denn | 12:365-87 |
| MISCELLANEOUS | | |
| On the Liquidlike Behavior of Fluidized Beds | J. F. Davidson, D. Harrison, | |
| | J. R. F. Guedes de Carvalho | 9:55-86 |
| Flows of Nematic Liquid Crystals | J. T. Jenkins | 10:197-219 |
| Relativistic Fluid Mechanics | A. H. Taub | 10:301-32 |

